



8

SEQUENCE LISTING

**COPY OF PAPERS
ORIGINALLY FILED**

<110> Kinney, Anthony
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<213> Glycine max

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      35             40             45

Met His Ile Gly Phe Ile Ser Met Glu Pro Lys Ser Leu Phe Val Pro
      50             55             60

Gln Tyr Leu Asp Ser Asn Leu Ile Ile Phe Ile Arg Arg Gly Glu Ala
      65             70             75             80

Lys Leu Gly Phe Ile Tyr Asp Asp Glu Leu Ala Glu Arg Arg Leu Lys
      85             90             95

Thr Gly Asp Leu Tyr Met Ile Pro Ser Gly Ser Ala Phe Tyr Leu Val
      100            105            110

Asn Ile Gly Glu Gly Gln Arg Leu His Val Ile Cys Ser Ile Asp Pro
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Ser Thr Ser Leu Gly Leu Glu Thr Phe Gln Ser Phe Tyr Ile Gly Gly
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Gly Ala Asn Ser His Ser Val Leu Ser Gly Phe Glu Pro Ala Ile Leu
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Glu Thr Ala Phe Asn Glu Ser Arg Thr Val Val Glu Glu Ile Phe Ser
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Lys Glu Leu Asp Gly Pro Ile Met Phe Val Asp Asp Ser His Ala Pro
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Ser Leu Trp Thr Lys Phe Leu Gln Leu Lys Lys Asp Asp Lys Glu Gln
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 245 250 255
 Tyr Asn Leu Tyr Asp Asp Lys Lys Ala Asp Phe Lys Asn Ala Tyr Gly
 260 265 270
 Trp Ser Lys Ala Leu His Gly Gly Glu Tyr Pro Pro Leu Ser Glu Pro
 275 280 285
 Asp Ile Gly Val Leu Leu Val Lys Leu Ser Ala Gly Ser Met Leu Ala
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 Pro His Val Asn Pro Ile Ser Asp Glu Tyr Thr Ile Val Leu Ser Gly
 305 310 315 320
 Tyr Gly Glu Leu His Ile Gly Tyr Pro Asn Gly Ser Lys Ala Met Lys
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 Thr Lys Ile Lys Gln Gly Asp Val Phe Val Val Pro Arg Tyr Phe Pro
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 355 360 365
 Ser Thr Ser Ala Arg Lys Asn Lys Pro Gln Phe Leu Ala Gly Ala Ala
 370 375 380
 Ser Leu Leu Arg Thr Leu Met Gly Pro Glu Leu Ser Ala Ala Phe Gly
 385 390 395 400
 Val Ser Glu Asp Thr Leu Arg Arg Ala Val Asp Ala Gln His Glu Ala
 405 410 415
 Val Ile Leu Pro Ser Ala Trp Ala Ala Pro Pro Glu Asn Ala Gly Lys
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Asp Asp His Cys Lys Asn Lys Glu His Leu Leu Arg Gly Arg Cys Arg
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<213> Artificial Sequence

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<210> 8
<211> 30
<212> DNA
<213> Glycine max

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<211> 701
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<212> PRT
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Pro Gln Pro Ser His Val Thr Ala Leu Ile Thr Arg Pro Ser Cys Pro
 35 40 45
Asp Leu Ser Ile Cys Leu Asn Ile Leu Gly Gly Ser Leu Gly Thr Val
 50 55 60
Asp Asp Cys Cys Ala Leu Ile Gly Gly Leu Gly Asp Ile Glu Ala Ile
 65 70 75 80
Val Cys Leu Cys Ile Gln Leu Arg Ala Leu Gly Ile Leu Asn Leu Asn
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Asn Ala Thr Cys Pro Arg Thr
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<212> DNA
<213> Glycine max

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35 40 45
Ala Ile Met Asn Asp Phe Asn Glu Pro Gly Ser Leu Ala Pro Thr Gly
50 55 60
Leu Tyr Leu Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly
65 70 75 80
Ala Val Ile Arg Gly Lys Lys Gly Pro Gly Gly Val Thr Val Lys Lys
85 90 95
Thr Gly Ala Ala Leu Ile Ile Gly Ile Tyr Asp Glu Pro Met Thr Pro
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<400> 13

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 20 25 30
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 35 40 45
 Ala Ile Met Asn Asp Phe Asn Glu Pro Gly Ser Leu Ala Pro Thr Gly
 50 55 60
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 65 70 75 80
 Ala Val Ile Arg Gly Lys Lys Gly Pro Gly Gly Val Thr Val Lys Lys
 85 90 95
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 <212> PRT
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Cys Phe Ala Phe Ser Ser Arg Glu Gln Pro Gln Gln Asn Glu Cys Gln
              20              25              30

Ile Gln Lys Leu Asn Ala Leu Lys Pro Gly Asn Arg Ile Glu Ser Glu
      35              40              45

Gly Gly Leu Ile Glu Thr Trp Asn Pro Asn Asn Lys Pro Phe Gln Cys
 50              55              60

Ala Gly Val Ala Leu Ser Arg Cys Thr Leu Asn Arg Asn Ala Leu Arg
 65              70              75              80

Arg Pro Ser Tyr Thr Asn Gly Pro Gln Glu Ile Tyr Ile Gln Gln Gly
              85              90              95

Lys Gly Ile Phe Gly Met Ile Tyr Pro Gly Cys Ser Ser Thr Phe Glu
      100              105              110

Glu Pro Gln Gln Pro Gln Gln Arg Gly Gln Ser Ser Arg Pro Gln Asp
      115              120              125

Arg His Gln Lys Ile Tyr Asn Ser Arg Glu Gly Asp Leu Ile Ala Val
      130              135              140

Pro Thr Gly Val Ala Trp Trp Met Tyr Asn Asn Glu Asp Thr Pro Val
      145              150              155              160

Val Ala Val Ser Ile Ile Asp Thr Asn Ser Leu Glu Asn Gln Leu Asp
              165              170              175

Gln Met Pro Arg Arg Phe Tyr Leu Ala Gly Asn Gln Glu Gln Glu Phe
      180              185              190

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Leu	Lys	Tyr	Gln	Gln	Glu	Gln	Gly	Gly	His	Gln	Ser	Gln	Lys	Gly	Lys		
		195					200					205					
His	Gln	Gln	Glu	Glu	Glu	Asn	Glu	Gly	Gly	Ser	Ile	Leu	Ser	Gly	Phe		
	210					215					220						
Thr	Leu	Glu	Phe	Leu	Glu	His	Ala	Phe	Ser	Val	Asp	Lys	Gln	Ile	Ala		
225					230					235					240		
Lys	Asn	Leu	Gln	Gly	Glu	Asn	Glu	Gly	Glu	Asp	Lys	Gly	Ala	Ile	Val		
				245					250					255			
Thr	Val	Lys	Gly	Gly	Leu	Ser	Val	Ile	Lys	Pro	Pro	Thr	Asp	Glu	Gln		
			260					265					270				
Gln	Gln	Arg	Pro	Gln	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Lys	Pro		
		275					280					285					
Gln	Cys	Lys	Gly	Lys	Asp	Lys	His	Cys	Gln	Arg	Pro	Arg	Gly	Ser	Gln		
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Ser	Lys	Ser	Arg	Arg	Asn	Gly	Ile	Asp	Glu	Thr	Ile	Cys	Thr	Met	Arg		
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Leu	Arg	His	Asn	Ile	Gly	Gln	Thr	Ser	Ser	Pro	Asp	Ile	Tyr	Asn	Pro		
			325						330					335			
Gln	Ala	Gly	Ser	Val	Thr	Thr	Ala	Thr	Ser	Leu	Asp	Phe	Pro	Ala	Leu		
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Ser	Trp	Leu	Arg	Leu	Ser	Ala	Gly	Phe	Gly	Ser	Leu	Arg	Lys	Asn	Ala		
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Met	Phe	Val	Pro	His	Tyr	Asn	Leu	Asn	Ala	Asn	Ser	Ile	Ile	Tyr	Ala		
	370					375					380						
Leu	Asn	Gly	Arg	Ala	Leu	Ile	Gln	Val	Val	Asn	Cys	Asn	Gly	Glu	Arg		
385					390					395					400		
Val	Phe	Asp	Gly	Glu	Leu	Gln	Glu	Gly	Arg	Val	Leu	Ile	Val	Pro	Gln		
			405						410					415			
Asn	Phe	Val	Val	Ala	Ala	Arg	Ser	Gln	Ser	Asp	Asn	Phe	Glu	Tyr	Val		
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Ser	Phe	Lys	Thr	Asn	Asp	Thr	Pro	Met	Ile	Gly	Thr	Leu	Ala	Gly	Ala		
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Asn	Ser	Leu	Leu	Asn	Ala	Leu	Pro	Glu	Glu	Val	Ile	Gln	His	Thr	Phe		
	450					455					460						
Asn	Leu	Lys	Ser	Gln	Gln	Ala	Arg	Gln	Ile	Lys	Asn	Asn	Asn	Pro	Phe		
465					470					475					480		
Lys	Phe	Leu	Val	Pro	Pro	Gln	Glu	Ser	Gln	Lys	Arg	Ala	Val	Ala			
				485					490					495			